Air Toxics Update

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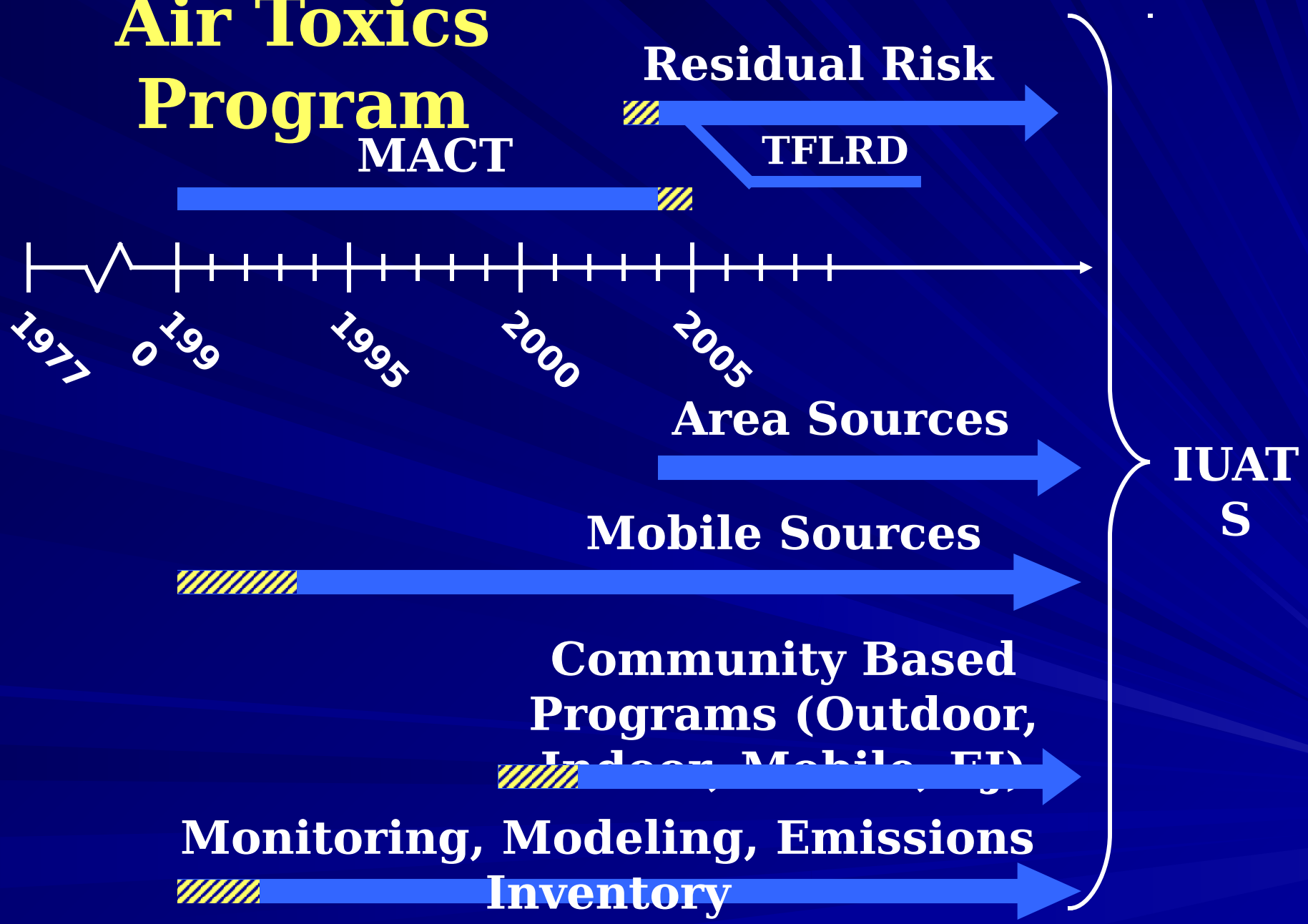
Air Toxics Program



Air Toxics Challenges

- Area Source Rules
- Low Risk Determinations
- Community Based Toxics Reductions
- Near Roadway Exposures
- Monitoring and Emission Data

Today's Focus:

- Urban Air Toxics (Area Source Program)

  EPA's mandate
  Status
  Future

- Residual Risk
  EPA's mandate
  Status
  Future

Area Source Program

Area Source Program Impact

- Emissions from these sources are small but they are large in number and may pose a risk in some areas
- Resources are limited for both developing and implementing traditional regulations
- Need to balance addressing the requirements and the areas where there are risks with the resources and practical restraints of implementation

CAA Requirements for Area Sources

- Background
  - 112(k)(3) and 112(c)(3) of the CAA
  - EPA to list area (small) source categories accounting for 90% of the urban emissions
  - EPA must identify the 30 priority urban HAPs
  - Must “subject to regulations”
  - Area source rules can be MACT or GACT

Status of Area Source Program

- EPA's strategy – July 19, 1999 FR
- Identified 33 priority HAPs
- 70 source categories identified
  - 15 rules completed
  - 5 new rules by October 2006
  - 20 prioritized by toxicity
  - 30 unaddressed

Proposed Approach

- **Two pronged approach**
  - **Traditional Standards (potentially targeting applicability)**
  - **Flexible Standard**
- **Two Innovative mechanisms**

  These can be used in conjunction with the either approach and require thinking outside of the typica command and control approach
  - **Pollution prevention**
  - **Voluntary Programs**

Traditional Standards

- Implement Nationwide?
- Target Applicability to “areas of concern?”
- **Questions**
  - What criteria do we use to determine which of the sources categories fit in this group? Emissions cut offs? Number of sources nationwide?
  - If target applicability, what criteria do we use? Risk, urban area, nonattainment area, other?

Flexible Rule(s)

- One generic rule that can address some or all of the area sources.
- It would lay out the requirements for S/L/T development of requirements appropriate for the area.
- EPA would provide “CTGs like” technical guidance for the covered Source categories
- Questions
  - Would applicability be targeted based on risk or other criteria?
  - What is the scope of the rule? Would it look only at those source categories on the list or could it be broader based on risk assessment?
  - What tools can we provide to determine where rules apply?

Voluntary Program

- Purpose
  - Develop an innovative approach to address urban air toxics emissions
  - Identify approaches that may be less resource intensive than rulemaking
- Approach
  - Identify trade associations (or similar organizations) that are receptive to voluntary approaches
  - Fund trade organizations through cooperative agreements to develop voluntary programs

Residual Risk Program

Residual Risk Mandate

- 112(f) of the Clean Air Act Amendments
- Assess each MACT category
- Promulgate standard within 8 years
- Provide ample margin of safety
- Assess individual most exposed
- No standards for area sources with GACT

Status of Residual Risk

- 25 MACT risk evaluation projects ongoing
- 5 show potential low risk
- 1st RR rule (Coke Ovens) in 2005
- 3 RR rules due in 2006
  - Dry Cleaners/HON/Degreasers
- 4 proposals of no further control in 2005
  - Ind. cooling towers/Magnetic tape
  - EO sterilizers/Gasoline distribution

Future of Residual Risk

- Two novel approaches being developed
  - The Total Facility Low Risk Demonstration Option (TFLRD)
  - Generic Residual Risk Rule (GRRR)

What is the Total Facility Low Risk Demonstration Option?

- Voluntary component of the residual risk program
- Sources that demonstrate they are low risk automatically meet 112f requirements
  - These sources would not be required to comply with residual risk requirements
  - These sources would still be required to comply with MACT

What is the Process?

- Source conducts total facility risk assessment
  - Lookup tables or site-specific assessment
  - Must consider inhalation, multimedia, and ecological risks
- Source submits their assessments for review/approval
  - Review all assessments (EPA/states)?
  - Self-certification with audit review?
  - Review by independent 3rd party?

What is the Process?

- If approved, parameters in low risk demonstration are incorporated into title V permit (e.g. emission rates, stack parameters, etc.)
  - Parameters become enforceable permit limits
- Low risk sources (e.g. maximum cancer risk $\leq$ 1E-06 and HI $\leq$ 1.0) automatically meet their 112f requirements
- If something changes that could increase risk then source must re-certify that they remain low risk

Status of TFLRD

- Workgroup has received a draft of the analytic blueprint and of the proposed rule
- They are currently reviewing these documents
- Targeting the release of a proposed rule in late summer 2005

Goals of a Generic Residual Risk Rule (GRRR)

- Address low risk sources efficiently
- Focus increasingly limited EPA resources on reducing risks from highest risk facilities
- Achieve a higher quality assessment of risk to guide risk reduction efforts

Preliminary Outline of GRRR

- Sources subject to MACT required to conduct total facility risk assessment
  - Must consider inhalation, multimedia, and ecological risks
- Source submits their assessments for review/approval
  - Process for review/approval could involve EPA and/or states
- EPA groups sources according to risk (e.g. low, medium, or high)

Requirements Depend Upon Risk Level

- Low risk sources: no further control requirements under residual risk
  - Sources must incorporate risk parameters as limits in their title V permits
  - Definition of low risk
    - Maximum individual cancer risk below 1 in 1 million
    - All Non-cancer hazard indices below 1
    - Need to establish criteria for low ecological risk
- Medium risk sources: must decrease risks if feasible and cost-effective
  - Definition of medium risk?
- High risk sources: must decrease risks
  - Definition of high risk?

Status of GRRR

- Informal OAR workgroup is currently in “brainstorming” mode developing this option
- No definite timeline at this point

H E L P ??

- Air Toxics info. on EPA's A.T. Website:
  - www.epa.gov/ttn/atw
  - Click on "Rules and Implementation"
  - Scroll down and click on topics of interest
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